

IN THE CLAIMS:

Please amend the claims as follows:

12. (Twice Amended) A method for producing a light integrator, comprising the following steps for forming a cavity of the integrator having an inner reflective coating:

C1 fabricating at least two parts from which the light integrator can be assembled and which comprise surfaces provided as inner sides of the cavity;

providing reflective coating on at least the surfaces of the parts;

assembling and fastening the parts;

wherein the two parts are fabricated such that one of the two parts is provided with a projection for engaging in a cutout of the other part after assembly,

and wherein fastening is carried out by this following steps:

covering the assembled parts with shrink tubing, and;

shrinking the tubing until a suitable strength of the integrator is achieved for reducing a possible gap between said two parts in which light could be lost.

14. (Twice Amended) A light integrator for homogenization of a light bundle entering an input surface and exiting from an output surface, comprising:

C2 said light integrator having a cavity with an inner reflective coating for conducting light;

said light integrator being composed of at least two parts whose surfaces, which face inward after assembly, are provided with said inner reflective coating prior to assembly;

wherein one part is provided with a projection engaging in a cut out of the other part after assembly; and

wherein the parts are held together by at least one piece of shrink tubing such that the parts contact one another to be practically light-proof.

C3 19. (Twice Amended) The light integrator according to claim 14, wherein shrink tubing is arranged in the middle between the input surface and output surface for holding the parts together.

23. (Amended) A light integrator for homogenization of a light bundle entering an input surface and exiting from an output surface comprising:

said light integrator having a cavity with an inner reflective coating for conducting light;  
and

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said light integrator being composed of at least two parts whose surfaces, which face inward after assembly, are provided with said inner reflective coating prior to assembly;

wherein one part is provided with a projection engaging in a cutout of the other part after assembly, wherein the inner sides and outer sides of the light integrator form a cavity and are planar,

wherein the light integrator has the shape of a geometric prism with rectangular bottom and top surfaces provided as output and input surfaces, and the projection and cutout are rectangular or square in shape; and

wherein the parts comprise two T-shaped and two I-shaped side parts and wherein the parts are held together by at least one piece of shrink tubing such that the parts contact one another to be practically light-proof.